



# 8F3E1

## Edge AI Box

### Key Feature

- Jetson™ AGX Orin: 275/200 TOPS, 64/32GB LPDDR5, 64GB eMMC;
- Jetson™ AGX Xavier: 32 TOPS, 64/32GB LPDDR4X, 32GB eMMC
- Display: 1 × HDMI
- Rich I/O: 2 × RJ45, 4 × USB Type-A, 1 × Micro SD, 4 × GPIO, 2 × CAN, 2 × RS232
- Expansion: Built-in 2 × full-size miniPCle, 2 × M.2 M 2280, 1 × PCIe x16
- Operating Temperature: -25°C ~ +65°C
- Input Voltage: DC 12V
- Pre-installed Ubuntu

### Introduction

The 8F3E1 is a high-performance edge AI computing device powered by NVIDIA® Jetson™ AGX Orin/AGX Xavier, delivering 32–275 TOPS AI performance for education, research, industrial automation, smart city and energy scenarios.

Built with rugged compact industrial design and wide-temp components, it features rich I/O and flexible expansion for Ethernet, storage, communication and control modules to maximize integration flexibility.



Website



Intelligent Patrol



Intelligent Traffic Analysis



Visual quality inspection



Machine arm control

## Specifications

Module	Jetson AGX Orin 64GB	Jetson AGX Orin 32GB	Jetson AGX Xavier 64GB	Jetson AGX Xavier 32GB
<b>AI Performance</b>	275 TOPS	200 TOPS	32 TOPS	
<b>GPU</b>	2048-core NVIDIA Ampere GPU with 64 Tensor Cores	1792-core NVIDIA Ampere GPU with 56 Tensor Cores	512-core NVIDIA Ampere GPU with 64 Tensor Cores	
<b>CPU</b>	12-core Arm® Cortex® -A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3	8-core Arm® Cortex® -A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3	8-core NVIDIA Carmel Arm® v8.2 64-bit CPU 8MB L2 + 4MB L3	
<b>Memory</b>	64GB 256-bit LPDDR5 204.8GB/s	32GB 256-bit LPDDR5 204.8GB/s	64GB 256-bit LPDDR4x 136.5GB/s	32GB 256-bit LPDDR4x 136.5GB/s
<b>Storage</b>	64GB eMMC 5.1		32GB eMMC 5.1	
<b>Video Encode</b>	2x 4K60 (H.265)、4x 4K30 (H.265) 8x 1080p60 (H.265) 16x 1080p30 (H.265)	1x 4K60 (H.265)、3x 4K30 (H.265) 6x 1080p60 (H.265) 12x 1080p30 (H.265)	4x 4K60 (H.265)、8x 4K30 (H.265) 16x 1080p60 (H.265)、32x 1080p30 (H.265)	
<b>Video Decode</b>	1x 8K30 (H.265)、3x 4K60 (H.265) 7x 4K30 (H.265) 11x 1080p60 (H.265) 22x 1080p30 (H.265)	1x 8K30 (H.265)、2x 4K60 (H.265) 4x 4K30 (H.265)、9x 1080p60 (H.265) 18x 1080p30 (H.265)	2x 8K30 (H.265)、6x 4K60 (H.265) 12x 4K30 (H.265)、26x 1080p60 (H.265) 52x 1080p30 (H.265)	
<b>Display</b>	1x HDMI2.0			
<b>USB</b>	4x USB Type-A、1x Micro USB(OTG)		1x USB3.0 Type-A、3个USB2.0 Type-A、1x Micro USB(OTG)	
<b>Networking</b>	2x RJ45		1x RJ45	
<b>SD Card</b>	1 x Micro SD			
<b>Button</b>	1 x Recovery、1 x Reset			
<b>Expansion</b>	2 x Overall Length mini PCIe、2 x M.2 M (2280)、1x PCIe16		1 x Overall Length mini PCIe、1 x M.2 M (2280)、1x PCIe16	
<b>Other I/O</b>	4 x GPIO、2 x CAN、2 x I2C、1 x SPI			
<b>Serial Ports</b>	2 x RS232、1 x Debug (UART)			
<b>Temperature</b>	-25°C ~ +65°C			
<b>Dimensions</b>	198mm×197mm×45 mm			
<b>Power</b>	DC +12V			
<b>Weight</b>	1340g			

## Interfaces

